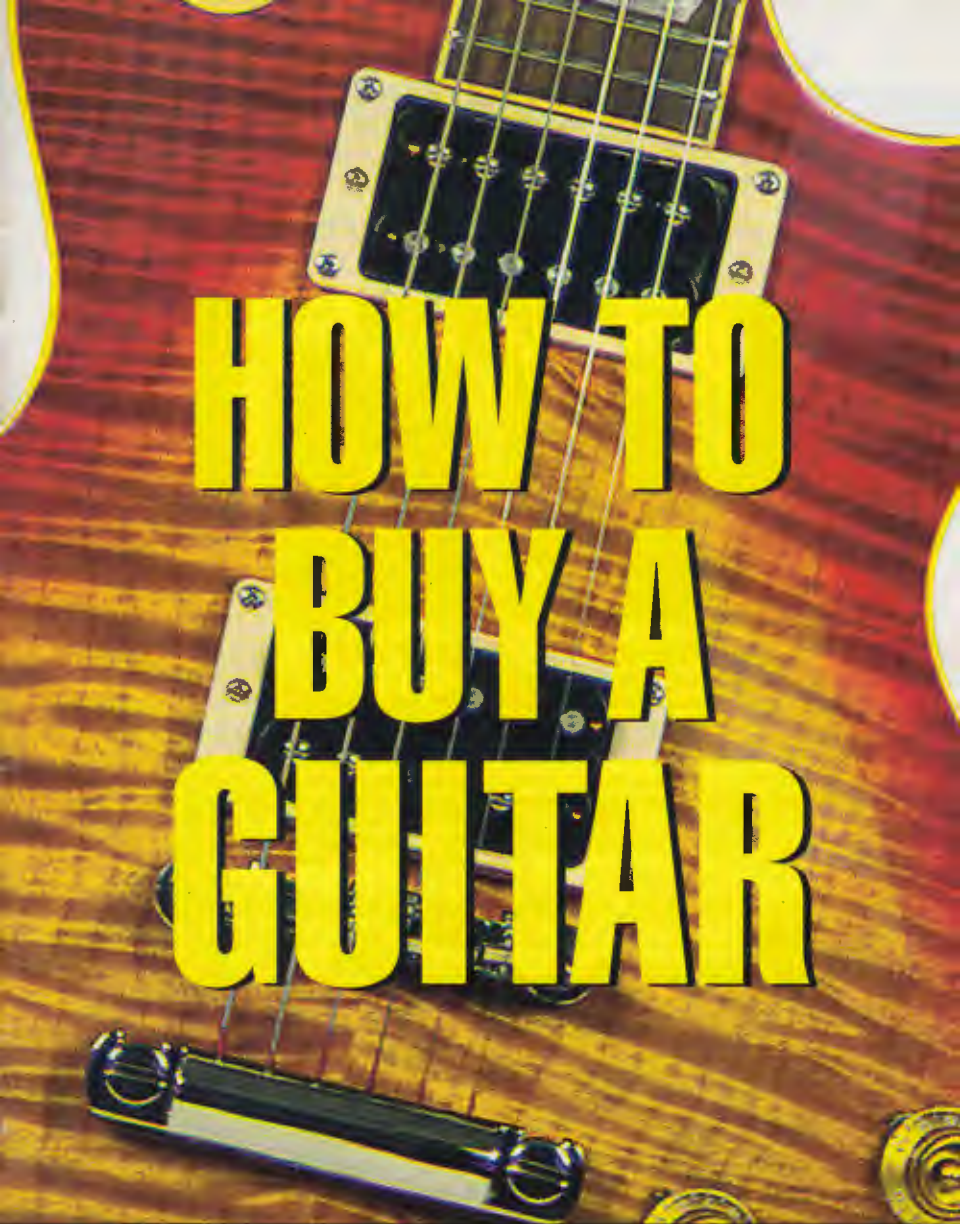




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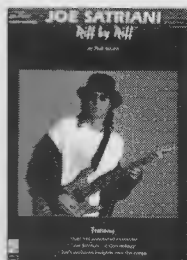
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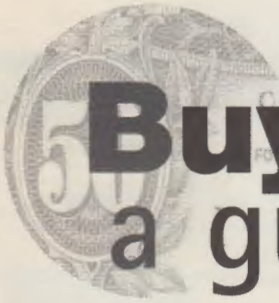
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C O N T E N T S

- 2 Buying A Guitar** Introduction
- 3 Know Your Style** Les Pauls, Stratocasters, Others
Prepare Yourself Know Before You Go
- 4 The Art Of The Deal** What To Pay, Where To Buy
Stock vs. Custom Modifications and Replacement Parts
- 5 Shapes Of Things** Finding The Right Fit
- 6 A Checkup From The Neck Up** Playability & Feel
- 8 Material World** Bodies, Necks, Fingerboards, Tops
- 10 Pickup Configurations** Single-Coil & Humbuckers
- 12 Hardware** Tuners, Frets, Bridges, Knobs And Switches
- 14 Electronics** Passive vs. Active, Pickup Switching,
Piezo-Magnetic Combinations
- 16 Playability And Setup** The Final Once-Over

Text by Jon Chappell • Design by Sharon Seidl-Vargas



Buying a guitar

Playing an A chord on an electric guitar, through an amp set to 10, may be one of the finest experiences a human being can have. The vibration of the strings under your fingers, the feel of the neck, the weight of the body—it all works together perfectly, like some kind of ferocious machine.

The guitar is not just an instrument, it's something that a guitarist can use to rattle walls or make girls cry. Not bad for something made mostly out of wood and metal. But you'd be hard pressed to get any guitar player to part with this simple wood and metal creation. To paraphrase a well-known bumper sticker, "You can take my girlfriend, take my dog, and steal my pickup. But if you touch my guitar, you'll *really* make me mad."

It goes without saying that guitarists are very particular about their axes.

But everyone has different feelings about just what kind of an axe that is. There are almost as many models, shapes, features, and colors as there are guitar players. This makes for a lot of choices, and a lot of chances to make a particular guitar become a unique representation of your style and attitude.

With a little bit of work, you can find the axe that fits any requirement you might have for charging forward into your guitar playing future. But whether you're a beginner or an old pro ready to move into the next realm of guitar models, you need to do a little bit of homework. Buying a guitar is like buying a car—there's a zillion models in a zillion different price ranges, but you need to find the one that's perfect for you. This one may be too expensive, or this one

might be too flashy, but somewhere in there is one that's *just right* (good thing that Goldilocks wasn't trying to buy guitars).

As you walk into your local music store and see the different colors and models displayed like the ultimate candy store, you may think that there's no way to choose sensibly—that you just have to go with your gut (and your wallet!). But with enough preparation, you can make informed decisions about the nuts and bolts of your future axe: body shape, pick-up configuration, bridge system, electronic routing, even the color.

If you already know you want a particular make and model, then those issues are decided for you. If, however, you go to the store without any real choices in mind, you have literally hundreds of options. While it's fun to play around on dozens of cool axes (as long as you don't try to play "Stairway To Heaven"), you'll actually save a lot of time if you have a firm idea of what you want in a guitar beforehand—down to the component level—and proceed from there. That doesn't mean you won't change your mind, make compromises, or be surprised along the way, it just means you'll know why you're making those changes. And, during the process you might learn something about your priorities and preconceptions regarding guitars.

That's where this guide comes in. We're going to provide you with everything you need to know to make an informed—and smart—decision about buying an electric guitar. To keep the field to a manageable level, we'll focus on electric solidbodies and the issues surrounding that particular guitar style.

Yet, even in the solidbody arena, the range of prices varies greatly. You can buy a working guitar—one with six strings and two pickups—for \$150. You can also pay \$3,000 for a custom hand-built guitar. Both have six strings and pickups. Is there a difference? You bet. But if you've only got \$150 in your wallet, then that \$150 guitar on the wall is a perfect match.

The good news is that, in most cases, you pretty much get what you pay for: the more you spend, the better the materials and workmanship. And, all the features we cover in this guide can comfortably be applied to guitars from about \$199 up to the \$2500 level. Still, always shop carefully. Guitars with equivalent or identical components can have widely varying selling prices, so if you want that higher-priced instrument, make sure you know why you're paying the higher price.

However, before we dive into issues like materials and workmanship, let's first look at some general strategies to consider when purchasing a new guitar.

KNOW YOUR STYLE

Once upon a time, life was simple and you could divide electric solidbody guitarists into two basic camps: Gibson Les Paul lovers and Fender Stratocaster lovers. People usually had a strong emotional draw to one or the other. Even when manufacturers began introducing electric models of their own, they still usually had their roots in Pauls or Strats. Today, there are literally dozens of quality guitar makers that make Strat. and Les Paul-style guitars, as well as guitars of their own design. Yet, each of these manufacturers has managed to create a particular, unique look—even when emulating a classic model. Before you consider pickups and bridges and other specific features, look at the brands carried in different stores and see which look appeals to you.

If you've got your sights set on a spe-

cific guitar, shopping can be an efficient endeavor: you automatically eliminate every guitar that's not brand X, model Y, or color Z. However, if all you know is that you want a Strat-style guitar—but not necessarily the Fender version—you instantly have a multitude of instruments to choose from. You'll then be looking at the guitars that match your criteria.

PREPARE YOURSELF

Establish your priorities before you head to the store. You don't want to seem vague when the salesperson begins his salvo of questions. You've got to have some idea of what you want in order to get the salesman to show you those instruments that will match your requirements. Speaking of salesmen, the first question a no-nonsense guitar-store guy might ask you is, "How much did you want to spend?" The question cuts to the chase. Translated, it means: "What price range are you looking at so I know which end of the lineup to bring you to?" It's a fair question and will save you time if you answer directly. He might also ask your ability and style preference, so be honest with yourself, be honest with him and have a prepared answer. If you say, "I like Strat-style guitars, I'm an intermediate blues player—not a shredder—and I want to keep it under \$600," you'll sound decisive and thoughtful. Then the salesman should have plenty to show and tell you. If you say "Well, I think maybe I'd kinda like something that the guy in that MTV video plays" you are not going to be taken very seriously.

Listen carefully and ask questions. You're there to observe and absorb. If you decide you're not ready to buy, tell the guy. Thank him for his time and get his name (he'll probably hand you his card). You're certainly free to go elsewhere and hear another salesman talk about other brands of guitars that he carries. Remember, you're *shopping*. It's no different with guitars than anything else.

THE ART OF THE DEAL

Discerning shoppers know the retail price of guitars before they ever walk into a store. The retail—or manufacturer's suggest list—price of an instrument is set by the manufacturer and is publicly available (contact the manufacturer yourself to receive literature). As of this writing, a Gibson Les Paul Studio lists for \$1165; a Fender American Standard Stratocaster lists for \$899.99. Those are the list prices, but music stores offer discounts, and the range can vary greatly. Big, urban-based stores that buy mass quantities of instruments can usually offer greater discounts than smaller stores in outlying or remote areas. Mail-order outlets can match and sometimes beat big-store prices because they don't have the overhead of maintaining a retail outlet.

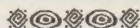
When deciding where to buy, service is an important consideration. Retail stores—unlike mail-order houses—are in a better position to devote close, personal service to a new-guitar customer. Remember though, the list prices are public knowledge and salespeople from both types of vendors are required to tell you their selling price *with no conditions attached*. The store can rightfully charge you up to list price; it's up to you to wrangle the maximum discount. How you do this is as old as bargaining itself, but a reasonable haggling range would be somewhere between the cut-rate quote of a nationally advertising mail-order house and the list price.

STOCK VS. CUSTOM

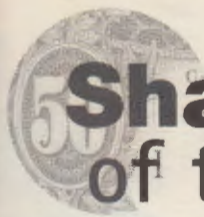
If you stick with an established brand name instrument, you're guaranteed a quality instrument with strong manufacturer support and high resale value. On the other hand, you can save money by buying the same style guitar in a lesser-known brand (like purchasing a personal computer clone). In some

situations, it might be worth it—providing you get an otherwise solid piece of workmanship. For example, if you're going to make extensive modifications—such as replacing the pickups and bridge or giving the body a wild paint job—buy a lesser-known lower-cost instrument. Electric guitars are, after all, modular creatures, and almost any part can be replaced quickly and easily—you can even do it yourself.

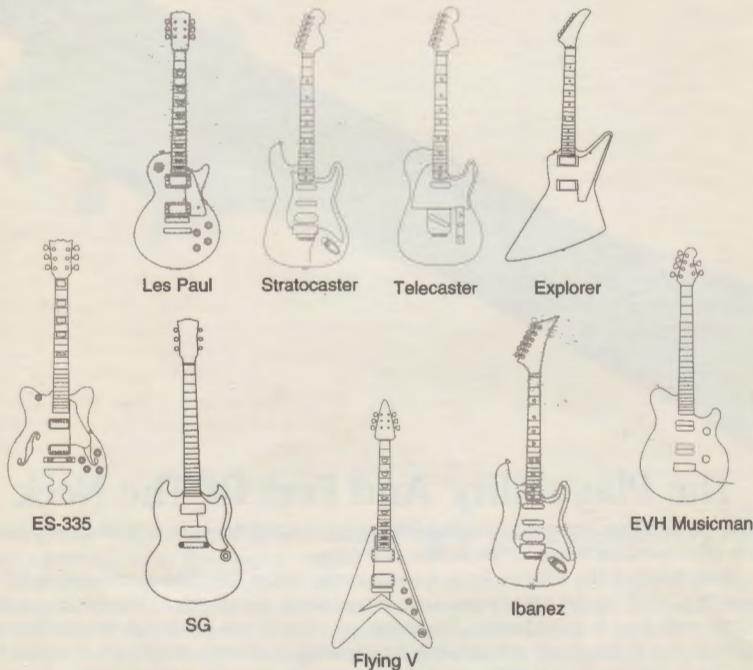
If you know you're going to put in Seymour Duncan Classic Strat pickups and a Floyd Rose bridge system (either because you plan to purchase them or you own them already), there's no sense in buying an American Standard Stratocaster. You'd be scrapping one excellent system (the Lace Sensor pickups and Wilkinson bridge) for another. Instead, buy a low-cost Strat-style guitar and perform your organ transplants on that. And keep this in mind: replacement parts aren't necessarily better than stock parts. This same reasoning holds true for artist models. Don't buy a Fender Stevie Ray Vaughan Strat if you plan on chopping it up. You'll upset the balance and defeat the instrument's whole purpose. But if you know you want to use that Duncan and Floyd, you can scrimp on issues like electronic workmanship and hardware quality. In that case, just make sure the guitar feels good in your hands and that the woodworkings are of high quality before you gut the sucker.



If you feel fully prepared psychologically to brave the retail arena, now's the time to fill your head with background so that your negotiating and shopping skills will be bolstered by hard knowledge. Even if you're not an expert, you can still benefit by examining an instrument closely and looking at the workmanship and materials. Look at inexpensive guitars as well as stuff way out of your financial range to see, if for nothing else, the dramatic differences in materials and workmanship—the two principal aspects of a guitar's quality.



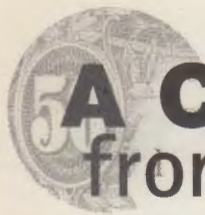
Shapes of things



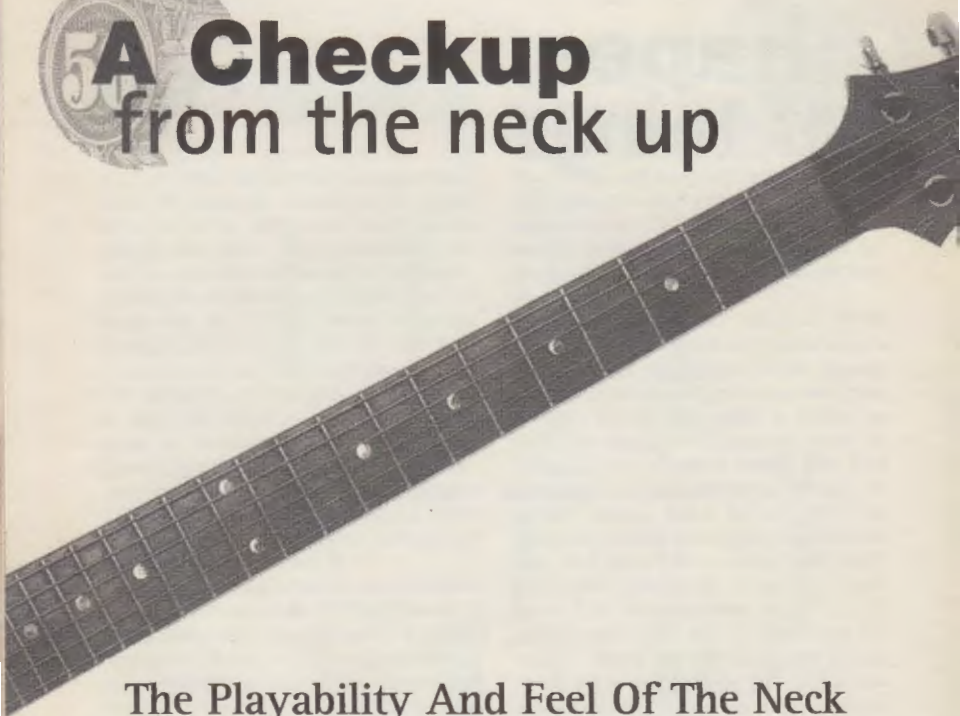
A Perfect Fit

The shape and feel of a guitar is what first draws a person to one particular instrument over another. Guitar playing is as much a tactile experience as an aural one, and if the guitar doesn't feel right—or look right in the mirror—you'll never even bother to plug the thing in.

Above are nine different body styles. There are many more of course, but this gives you a rough idea of the range of guitar shapes out there. We've included ES-335 semi-hollow-body, because, while technically not a solidbody, it functions better as a solidbody than as a hollowbody (its other "parent"). Familiarize yourself with these styles (by picking them up with your hands, not by looking at these pictures!) so that you're not thrown by a guitar just because it's different from what you're used to. A Les Paul, SG, and ES-335 all feel completely different, yet all have identical pickup configurations and neck specifications.



A Checkup from the neck up



The Playability And Feel Of The Neck

It is the neck that determines the playability of a guitar, and there are four principal aspects to consider: scale length, width, profile, and radius.

Scale length is the distance from the nut to the bridge. The Gibson standard is $24\frac{3}{4}$ "; Fender's is $25\frac{1}{2}$ ". Fender has a longer scale length, which contributes to the feel in two significant ways. First is string tension. The strings on a Fender are at a higher tension than on a Gibson, due to the simple principle that if two strings of differing lengths are drawn to the same pitch, the longer one will have a higher tension. To generalize, higher tension is better for harmonics, chicken pickin', and a springy funk sound; lower tension is better for string bending and the sloshier string response preferred by some blues players. The second difference is the distance between frets. On a shorter scale length the frets are closer together. This feels great in the lower register, but can become a little cramped up top—especially on 24-fret guitars. Many guitar makers split the difference and opt for 25" scale lengths. How a neck feels should be evaluated independent of the scale length.

The width is the distance from the first string to the sixth, or the *lateral* distance. The profile is how fat the neck is and how the taper is shaped (for example, rounded vs. Y-shaped). The radius is the curvature of the fingerboard and is measured as an arc of a circle bearing that number as the radius. For example, a 7" radius is more curved than a 12" radius. Shredders like wide fingerboards, thin profiles, and flat radii because these qualities facilitate tapping, wide bends (the strings don't "fret out" as quickly), and suit an even and developed technique (a classical guitar's neck has these attributes). Blues-based players prefer narrower fingerboards, chunky profiles, and curved radii. These necks are better for chord playing,

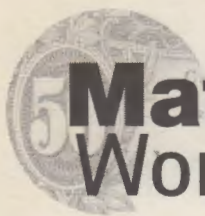


have a grittier feel, and make you work a little harder—an attribute appreciated by visceral players from the Stevie Ray Vaughan school.

One caution regarding thin-profile necks: they're impressive when you first play on them, but you risk two tradeoffs: stability and sustain. Because there is less mass, a thin-profile neck is more likely to warp and twist, so closer monitoring and maintenance is required to insure the integrity of a given setup. Less mass also means the neck is less resistant to string tension and vibration, thereby making it more liable to absorb string energy than transfer it. The result is some loss of sustain. Many guitar makers say that on electrics the sustain differential between thick- and thin-profile is negligible or even imperceptible, but the sustain issue remains a physical fact.

Another significant feature of necks is the way they attach to the body. There are three systems, presented here in order of increasing complexity and sustain potential. A bolt-on neck is where the neck is screwed in from the back and covered with a metal plate, *à la* Fender guitars. (You can remove and reattach the neck yourself using only a screwdriver.) A set-in neck uses a dovetail or fingerjoint and glue for the connection, and the seam is finished or painted over, producing a visually uninterrupted surface from neck to body, *à la* Gibson guitars. A neck-through-body design has a continuous one- or two-piece neck that goes all the way down to the bottom of the guitar, *à la* Alembic guitars. The body pieces are glued to the two sides of the neck.

Now that we've examined the physical dimensions of electric solidbodies, let's take a look at some of the different materials used to create them.



Material World

Bodies

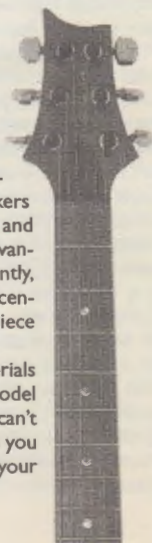


Electric solidbodies are made of various woods: mahogany, ash, alder, basswood, poplar. Oddly, many manufacturers aren't forthcoming about what type of wood was used for a particular model's body. This allows them to interchange wood types—say, between ash and alder—on the same-named model. For lower-priced guitars (\$400 and under), the body is usually a laminate—several pieces of lower-grade wood glued together—covered with a veneer top. You may have to do some digging to discover a guitar body's true identity. Some guitars, notably Strats and Teles, come in both alder and ash. Alder is lighter than ash, and considered more desirable, especially in Tele circles. If you're auditioning Teles and one is considerably lighter than another, find out if it's because you're comparing alder to ash. Swamp ash (a light-grade ash) is even lighter than alder and very resonant, making it also a popular choice for Teles.

Necks

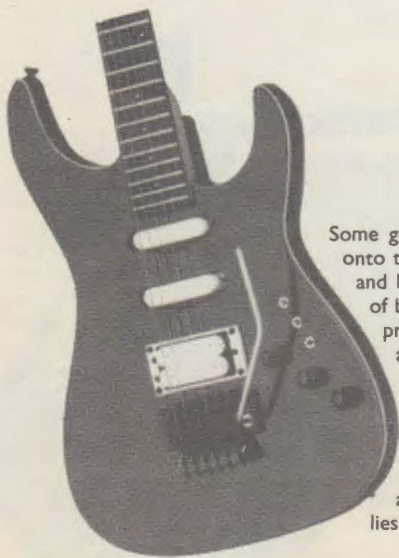
Mahogany and maple are the two primary choices for neck woods. Maple is a blond, rigid, heavy wood that is ideally suited for supporting the string tension of a guitar. (Bowed-string instrument makers have been using maple for centuries.) Mahogany is dark, and softer and lighter than maple, and also makes an ideal neck material. The one advantage mahogany has over maple is that it's less likely to twist. Consequently, on many higher-grade maple necks you'll see strips of mahogany in the center (called a "skunk stripe"), which adds structural rigidity to the two-piece maple construction.

Although it's important to understand the differences in neck materials and construction, it's pretty much a moot issue if you decide on one model over another: You can't buy an SG with a bolt-on maple neck and you can't buy a Tele with a set-in mahogany neck. But this information could help you if you were to assemble (or have someone build from your design) your dream guitar from scratch.



Fingerboards

Except for all-maple-neck Fenders, most guitars have a separate, thin plank of wood covering the neck, called the *fingerboard*. The most popular choices are ebony and rosewood, with rosewood enjoying a comfortable lead these days. Ebony is denser and slicker, yielding a smoother and faster feel. But it's also more expensive and more difficult to work with, thus making it the second choice for guitar makers. Rosewood is nearly as good for a smooth feel, but beware of rosewood in ebony clothing. Some makers stain their rosewood fingerboard to an almost black, ebony-like appearance. This is okay as an aesthetic choice, but just be aware that if you see reddish veins peeking through the otherwise blackish color, you're looking at rosewood.

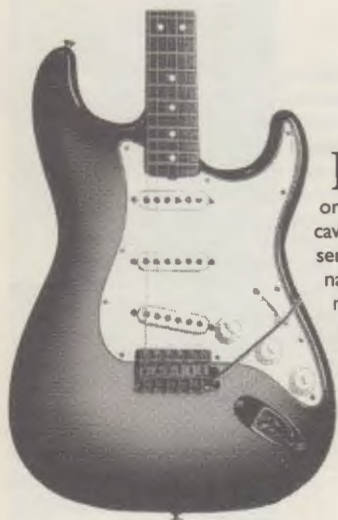


Tops

Some guitars have a separate top material capped onto the body. These tops are found on Les Pauls and high-end guitars. They're usually constructed of bookmatched maple (the wood is "sliced" to produce two layers of identical grain patterns and placed at mirror images to each other), and feature highly figured grain patterns with names like tiger-striped, flame, and quilted. High-end guitars usually have stunning maple tops that are also highly *contoured*—a thick maple cap is deeply carved and scooped out, leaving steep hills and gulches that perform magic with reflected light.



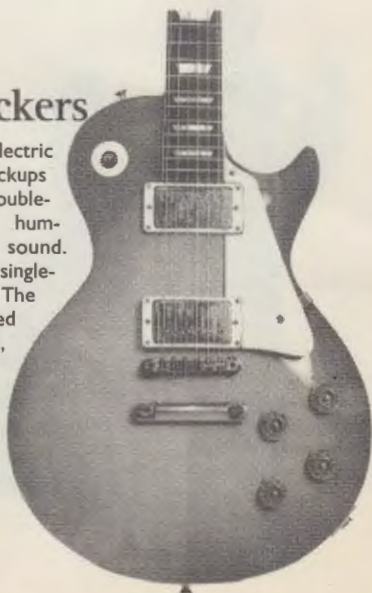
Pickup Configurations

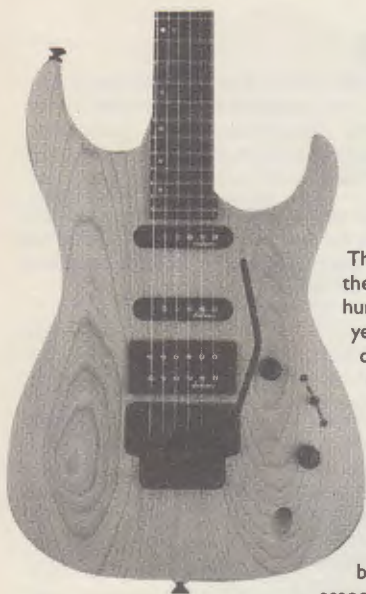


Pickups are the most important tone-generating element in an electric guitar. They are those block or bar-like objects that lie underneath the strings in cavities of the guitar body. The pickups magnetically sense the string vibration and send them down the signal chain. They work just like microphones, except that microphones work acoustically and a pickup operates electrically. Most electric guitars have one, two, or three pickups. The pickup near the bridge is used for lead; the pickup near the neck is used for rhythm. Guitars with a third, middle pickup can combine that with either the lead pickup or rhythm pickup, creating more variety of sounds.

Single-Coil & Humbuckers

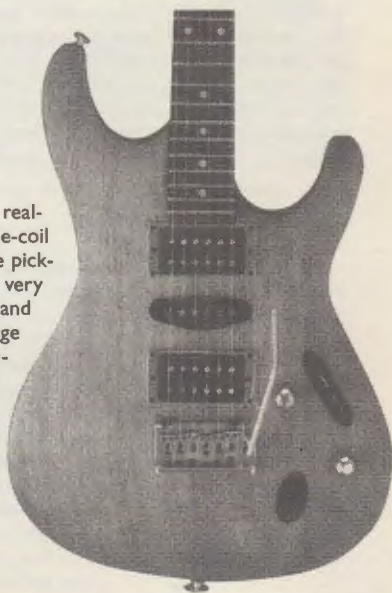
There are two basic types of pickups used in electric guitars: single-coil and double-coil. Single-coil pickups are brighter, noisier and less powerful than their double-coil counterparts. Double-coils—also known as humbucking pickups—have a smoother, fuller sound. Designers, hoping to improve the performance of single-coil pickups, put two single-coils side by side. The result was less noise (due to a phenomenon called *phase cancellation* and hence the name *humbucking*), more power (due to the increased copper windings), some loss at the very high end (also due to phase cancellation), but enhanced bass, midrange and upper-midrange frequencies. In the end the double-coil wasn't better, it was just different, and guitarists chose single-coils and humbuckers solely on the basis of taste.





The classic example of a single-coil configuration is the Fender Stratocaster. The classic example of a humbucking configuration is the Gibson Les Paul. For years guitarists were either squarely in the Strat camp or the Les Paul camp. Jimmy Page was a Les Paul man; Jimi Hendrix was a Strat man. Jeff Beck and Eric Clapton created huge sensations when they switched from their trusty Les Pauls to Strats. But now technology has advanced to such a degree that signal processors and amplifiers can change—radically, if desired—the original signal produced by the pickup. *Equalization* or *EQ* can turn the smooth tone from a humbucker into the brittle, thin sound more closely associated with a single-coil, and vice versa.

The *hybrid* design was created when people realized that they like the sound that adjacent single-coil pickups produced, but found the single-coil bridge pickup used by itself was too harsh and brittle to be very usable. The perfect solution was to have the neck and middle pickups be single-coil and have the bridge pickup be a humbucker. Or, perhaps a bridge humbucker with a *coil tap* switch—a toggle switch that cuts off one of the coils, giving you a three-single-coil configuration. Not to be left out, humbucker-biased guitar makers made a hybrid where the neck and bridge were humbuckers and the middle pickup was a single-coil.



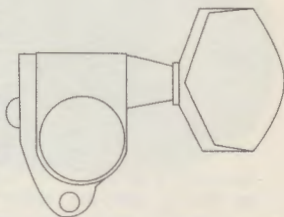


Hardware

The metal components of your guitar include the tuning machines, frets, the bridge, and sometimes knobs and switches. Chrome-plated hardware is the cheapest, and comes standard (that is, at no extra charge) on most new guitars. If the same model is available in black or gold hardware, you'll usually pay extra for the option—your choice.

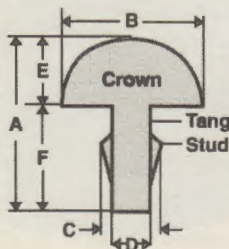
Tuners

These are the "keys" that twist your strings into tune. Older, vintage guitars—and vintage reissues—feature the "worm drive" mechanism of a grooved post turning a gear wheel. This was replaced by the superior "rotomatic" mechanism, which is employed in all Grover, Gotoh, Schaller, and Sperzel tuners. Recently, the Waverly company issued high-quality worm drives that have an excellent feel and resist slippage. Test the tuners for "shaft wobble," which is play in the post that sticks through the headstock. Detune the string a couple of steps to relieve some of the pull when checking for this. Also test for "backlash," which is where the post remains stationary when you turn the peg in the opposite direction from where you've just made an adjustment. If your tuners are cheapies and you suspect poor workmanship, you'll probably see it more in the treble side of a "split-three" configuration (the treble strings wrap to the right over the post). Many guitar makers have a company like Gotoh or Schaller make the tuners for them, so ask what kind of tuners the guitar has if the name doesn't appear on the cover plate.



Frets

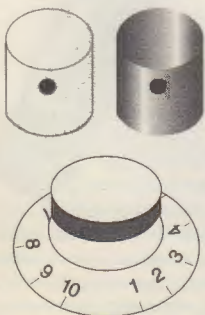
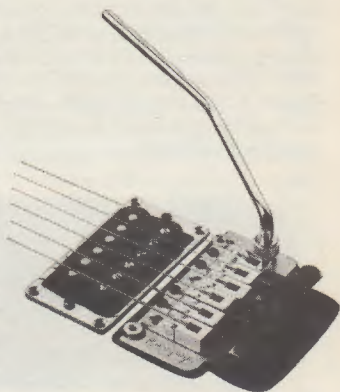
Frets are actually pieces of capped wire that are cut, pounded into slots in your fretboard and then glued and finished (filed and polished). Rub your fingers and thumb along the length of the neck to make sure there are no sharp spots or that the frets haven't heaved up from their slots. Different types of frets also change the feel slightly, so be aware of which kind are on your guitar. For example, Gibson uses jumbo frets which are high and broad. Early Gibsons were called "fretless wonders" because they were very low, square, and broad, giving a low action and allowing your left hand to zip up and down the neck unimpeded. Nowadays, though, frets have more rounded heads (called "beads") and come in either wide or narrow (the width of the fret) or high and low (how tall the fret is above the fingerboard). Again, don't judge apples against oranges if



you're evaluating two guitars with different fret gauges. In general, wide frets offer more sustain because of the increased mass in contact with the string. Most guitars come with medium-high frets. Metallars prefer extra tall and wide frets, because it facilitates tapping, hammering, and pulling. Additionally, because the wire is so far from the fingerboard, you can achieve more expression by bearing down with your left-hand finger (sort of like a poor-man's scalloped fingerboard).

Bridges

Fixed or floating? Fixed-bridge systems include the Gibson-style Tune-o-Matic, Tele-style tailpieces, and strings-over-the-saddle-to-stud-mounted tailpieces, as found on the Les Paul and SG. The advantages of a fixed bridge are tuning stability, sustain and simple operation. If you don't "wang," don't buy a floating bridge. If you *do* do the wang thang, consider the two different approaches, as represented by Floyd Rose and Kahler. A Floyd Rose requires the body to be routed all the way through, whereas a Kahler is top-mounted, requiring only that material be removed from the top. Kahlers are good choices for guitars that have never had a through-body rout, and for people who don't absolutely have to have a Floyd Rose response. Newer floating bridges allow you to "lock-off" the floating mechanism, thereby achieving a quasi-stop-tailpiece effect. But, of course, the best way to keep your strings fixed at their pitch is to have a stop tailpiece. A good test for a floating bridge is to strike the open first string and let it ring while silently bending the third string. If you can bend the string the distance of a whole step without the first string going out of tune, you're in good shape. You can perform pedal-steel type bends (bending one string while another sustains) without too much loss of intonation. If the floating bridge you're testing allows the strstsustaining, unbent strings to slip, find out if the tension can be adjusted to prevent this.



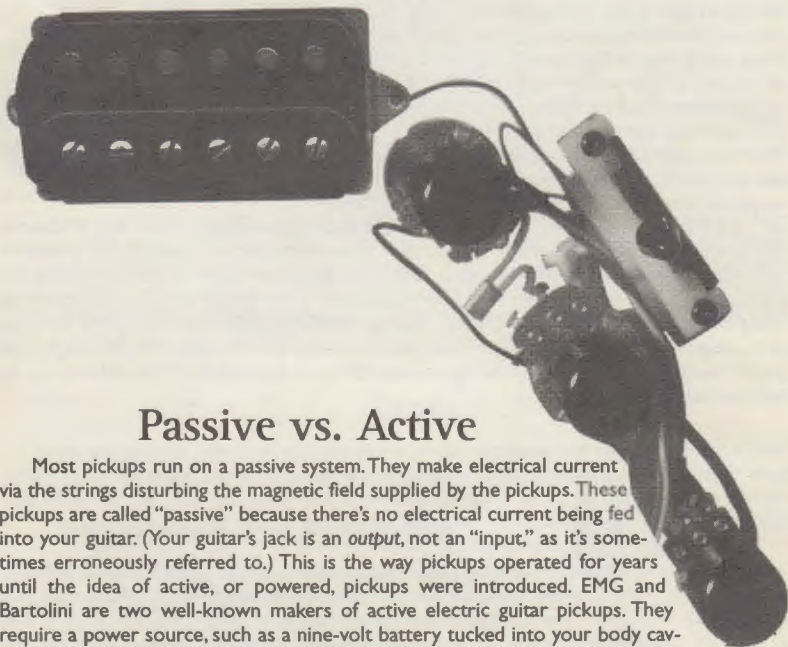
Knobs And Switches

Making judgments on the knobs and switches on a prospective guitar is largely an aesthetic consideration. Black and gold metal knobs are more expensive than plastic ones, but they might not be appropriate on a Les Paul Classic reissue. You may choose to replace knobs for a look or feel, but changing from a flanged "saucer" knob (like those found on Strats) to a "speed" knob or knurled dome knob is one of personal choice. Switches should be of high quality and have no play in their various positions, but the same guidelines apply.



Electronics

It's amazing how many shoppers will pick up a guitar and not know the electronic scheme. Just because you see three controls on a Strat-type guitar doesn't mean it's volume, volume, tone. It might be a master volume, tone, and presence boost. After you pick up a guitar and get a sound, go through the switches and knobs slowly, determining what each one does (for aesthetic purposes, many knobs are unlabeled). See if the knobs feature a "pull switch," which allows them to pop part-way up to kick in additional circuitry (like a gain boost or coil tap). There are some unique approaches to electronics to consider these days.

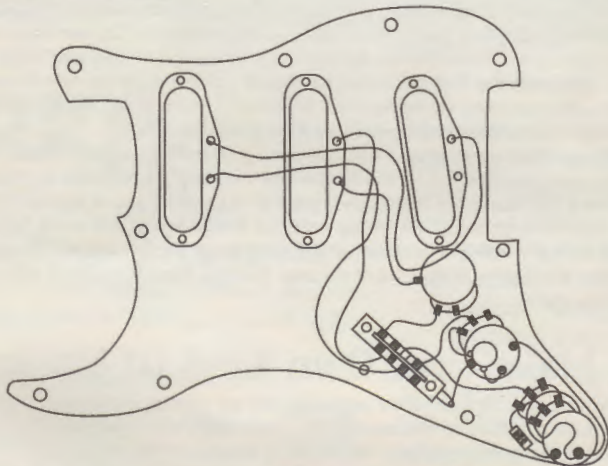


Passive vs. Active

Most pickups run on a passive system. They make electrical current via the strings disturbing the magnetic field supplied by the pickups. These pickups are called "passive" because there's no electrical current being fed into your guitar. (Your guitar's jack is an *output*, not an "input," as it's sometimes erroneously referred to.) This is the way pickups operated for years until the idea of active, or powered, pickups were introduced. EMG and Bartolini are two well-known makers of active electric guitar pickups. They require a power source, such as a nine-volt battery tucked into your body cavity, but deliver a much stronger signal. The result is super quiet pickups with great frequency response. Studio and pit musicians love these pickups for their quietness and versatility as well as their great sound. What you don't get is the classic sound offered by many of the replacement-pickup makers, such as Seymour Duncan, DiMarzio, Lawrence, Bartolini, Lace, etc. But an active system is worth checking out for its clean and quiet operation as well as its unique sound.

Pickup Switching

The standard way to select pickups is with one switch. A two-pickup guitar typically uses a three-way (its positions are top, middle, and bottom). This yields bass (also called rhythm or neck) pickup only, both pickups, or treble (called lead or bridge) pickup only. Three-pickup guitars use a five-way switch: 1) neck only; 2) neck and middle; 3) middle only; 4) middle and bridge; 5) bridge only. A newer, popular pickup-switching system features one toggle switch per pickup, rather than one multi-selector switch. The toggle switch—which turns the pickup either on or off—offers some advantages. Consider a three-pickup Strat with a standard five-way selector switch. Although you can get each pickup individually (three positions) or any two adjacent pickups (two positions), you can't get the two outside pickups or all three pickups on—two options that are more useful than the middle-pickup-only selection of position #3 in a five-way. With toggle switches, you can also turn all three pickups off—handy if you're employing a piezo (a transducer, or contact pickup that senses string vibration acoustically, not magnetically) pickup system under the saddle (a separate piece of metal, usually with adjustable intonation, that's placed in front of the tailpiece). What's more, you can opt for three-position toggles. These can be wired as on, off, or on w/reverse polarity, for situations where you want to reverse the phase of any two adjacent pickups. A three-position toggle on a humbucker could be set up as on, off, coil tap. The downside? You might have to flick two or more switches to achieve a desired setup, and you have three switches sticking out of the top instead of one. But the increased flexibility of the toggle-switch system makes it well worth considering.



Piezo-Magnetic Combinations

Piezo pickups are traditionally used on acoustic guitars because they sense string movement through vibration not electro-magnetics. But lately, more and more electric guitar makers are including them along with magnetic pickups. Piezos add an incredible dimension to the sound. Imagine a combined tone where the spongy, jangly attack of an acoustic is followed by the cool sustain of an electric. It's possible if you employ both systems. Piezo pickups are unobtrusive, almost invisible, so it won't hurt the look of your axe. You can run your pickups in stereo—piezos through one amp, magnetics through another.



Playability and setup

At last you're ready to buy. You've narrowed down your choices, and you're ready to put the guitar through some final checks. What should you look for? Even if you're not an expert you should put your eyeball right up to the joints and crevices to check the workmanship. Examine joints—like where the neck joins the body—to make sure everything's tight and aligned. Pickup cavities are another place to look: check for spilled glue drops or rough sanding work left unfinished. To check the top's finish, hold the guitar parallel to the floor, at eye level, and look for blemishes. Rocking the guitar from side to side will cause the light to strike the top at different angles, and inconsistencies will reveal themselves as the light is reflected into your eye.

As for the neck, determine its warpage or lack thereof in much the same way you would a pool cue: hold the headstock under your chin and look down the edge of the fingerboard to check for bowing in either direction. Between the 7th and 12th fret there should be a slight relief (bowing away from the strings), but otherwise the strings should be at a uniform distance from the strings—about $\frac{3}{32}$ " at the 1st, 12th, and 20th fret. If you're not used to doing this, bring a metal straightedge and place it on edge against the top of the frets.

I recommend playing the guitar acoustically at first to get an idea of how it plays, without the aural distraction of the amp sound. Listen especially for string buzz. On electric guitars, a little is okay; just make sure it doesn't come through when you plug in to the amp. After you plug in, check the intonation; the 12th-fret harmonic should match exactly the fretted version of the note. If the note frets sharp, the saddle is too far forward. Check to see if it can be adjusted back (toward the end pin). Reverse the procedure if the fretted note is flat.

Another good idea is to bring a friend, expert, or teacher who knows more than you do. Things may check out fine, but he should give you a running commentary on what he's doing every moment. For example, if the action is too high it could be one of several things: the neck is seated incorrectly or set at the wrong angle; the bridge and/or nut is too high; the neck is warped because of a maladjusted truss rod; the string gauge is too heavy and the increased tension is pulling the floating bridge out of the zero position. Have your friend walk you through each of these checks.

Make Your Own Kind Of Music

Once you've gone through all the various brands and models and are very near to making a final decision, you ought to try the axe out in a playing setup that comes close to matching your own. Don't go to the store and play the six-string finalists through a Marshall JCM 900 if your favorite setup is a Fender Bassman. If you normally play through an effects processor, bring it to the store. If you really want to, haul your amp down to the store for a final ride before buying. Some discriminating buyers even have the salesman put their favorite string gauge on the guitar just to be sure.

The important thing is to spend time with the guitar that you're going to end up owning. Play it for a while, go out, come back and play it again. You're going to live with it for quite a while, so make sure that you're ready to have it as a constant companion (like a pet or a girlfriend). In the end, the guitar you buy will not only have to pass a battery of physical tests, but it must feel like the one that's meant for you. Then you can get on with your life, liberty, and the pursuit of happiness.

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